Listing of Claims:

1. (currently amended) A communication system comprising:

an optical transmission network having an input end and an output end;

a wavelength division multiplexer coupled to said input end of said optical transmission network, said wavelength division multiplexer being configured to receive data packets directly from each internet traffic source in a plurality of internet-traffic sources and to modulate, in response to said data packets, a corresponding plurality of optical beams, each of said optical beams having a selected wavelength from a first set of selected wavelengths;

wherein the wavelength division multiplexer is further configured to receive data packets from a SONET interface, and wherein the data packets from the SONET interface are modulated to a corresponding optical beam from a second set of selected wavelengths; and

a wavelength division demultiplexer coupled to said output end of said optical transmission network, said wavelength division demultiplexer being configured to select a particular optical beam from said plurality of optical beams and to retrieve data packets therefrom.

2. (original) The communication system of claim 1 wherein said wavelength division multiplexer comprises:

a plurality of wavelength translators, each of said wavelength translators being directly connected to an internet-traffic source from said first plurality of internet-traffic sources and configured to modulate an optical beam in response to data packets received from said internet-traffic source, said optical beam having a selected wavelength;

an optical coupler in communication with each of said wavelength translators and coupled to said input end of said optical transmission network.

3. (original) The communication system of claim 1, wherein said communication system further comprises:

a plurality of wavelength translators, each of said wavelength translators being directly connected to an internet-traffic destination selected from a plurality of internet-traffic

destinations and being configured to provide data packets received from said demultiplexer to said internet-traffic destination.

4. (original) The communication system of claim 1, further comprising a first SONET interface coupled to said input end of said optical transmission network, said first SONET interface being configured to receive data from a SONET-traffic source packaged in a SONET frame for transmission on said optical transmission network on a selected wavelength dedicated to SONET traffic.

5. (original) The communication system of claim 4, further comprising a second SONET interface coupled to said output end of said optical transmission network, said second SONET interface being configured to retrieve said SONET frame from said optical transmission network and to provide said data contained therein to a SONET traffic destination.

6. (original) The communication system of claim 1, wherein said optical transmission network comprises an optical fiber configured for data transmission at rates of OC-192 or greater.

7. (currently amended) A method comprising:

providing an optical transmission network having an input end and an output end;

coupling a wavelength division multiplexer to said input end of said optical transmission network;

configuring said wavelength division multiplexer to receive data packets directly from each internet-traffic source in a plurality of internet-traffic sources and to modulate, in response to said data packets, a corresponding plurality of optical beams, each of said optical beams having a selected wavelength from a first set of selected wavelengths;

wherein the wavelength division multiplexer is further configured to receive data packets from a SONET interface, and wherein the data packets from the SONET interface are modulated to a corresponding optical beam from a second set of selected wavelengths;

coupling a wavelength division demultiplexer to said output end of said optical transmission network, ~~said wavelength division demultiplexer~~; and

configuring said wavelength division demultiplexer to select a particular optical beam from said plurality of optical beams and to retrieve data packets therefrom.

8. (original) The method of claim 7 wherein said coupling said wavelength division multiplexer comprises:

connecting each of a plurality of wavelength translators directly connected to an internet-traffic source from said first plurality of internet-traffic sources;

configuring each of said wavelength translators to modulate an optical beam in response to data packets received from said internet-traffic source, said optical beam having a selected wavelength;

coupling an optical coupler in communication with each of said wavelength translators to said input end of said optical transmission network.

9. (original) The method of claim 7, wherein said method further comprises:

coupling a plurality of wavelength translators to said internet-traffic destination, each of said wavelength translators being directly connected to a internet-traffic destination selected from a plurality of internet-traffic destinations and being configured to provide data packets received from said demultiplexer.

10. (original) The method of claim 7, further comprising coupling a first SONET interface to said input end of said optical transmission network, said first SONET interface being configured to receive data from a SONET-traffic source packaged in a SONET frame for transmission on said optical transmission network on a selected wavelength dedicated to SONET traffic.

11. (original) The method of claim 10, further comprising coupling a second SONET interface to said output end of said optical transmission network, said second SONET interface being configured to retrieve said SONET frame from said optical transmission network and to provide said data contained therein to a SONET traffic destination.

12. (currently amended) The method of claim 7, wherein providing said optical transmission network comprises ~~an~~ providing an optical fiber configured for data transmission at rates of OC-192 or greater.

13. (new) A method for providing bifurcated communication across a high capacity backbone, the method comprising:

providing a multiplexer coupled to an optical transmission network, wherein the multiplexer is operable to:

receive a handset communication via a first SONET interface and to modulate the handset communication to a first optical beam of a first wavelength, and

receive an internet communication directly from an internet source and to modulate the internet communication to a second optical beam of a second wavelength;

providing a demultiplexer, wherein the demultiplexer is operable to:

select the first optical beam of the first wavelength and provide it to a second SONET interface; and

select the second optical beam of the second wavelength and provide it directly to an internet receiver.

14. (new) The method of claim 13, wherein the method further comprises:

coupling the first SONET interface to the multiplexer; and

coupling the second SONET interface to the demultiplexer.

15. (new) The method of claim 13, wherein both the handset communication and the internet communication are voice communications.

16. (new) The method of claim 13, wherein the handset communication is a voice communication, and wherein the internet communication is a data communication.

17. (new) The method of claim 13, wherein the handset communication originates from an analog telephone.

18. (new) The method of claim 13, wherein the internet communication originates from a Voice Over Internet Protocol Phone.

19. (new) The method of claim 13, wherein the multiplexer and the demultiplexer are communicably coupled by an optical fiber.

20. (new) The method of claim 13, wherein the optical fiber is configured for data transmission at rates of OC-92 or greater.